

DOE READING ROOM
DOCUMENT TO BE RELEASED

T070584

1. Location of Reading Room: Idaho Operations Public Reading Room 1776 Science Center Dr. University Place Idaho Falls, ID 83403	2. Expected Release Date: June 26, 1995
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3. Document Type:

- ☒ Letter
☐ Memorandum
☐ Report
☐ Publication
☐ Other (Specify)

a. If letter or memo:

To: Thomas J. Rowland, Aerosol Studies
Section, Industrial Hygiene Group,
University of California, Los Alamos
Scientific Laboratory
From: T. H. Oddie, D. Sc., Medical Center,
University of Arkansas
Subject: RECORD OF INTERNAL DOSE
ASSESSMENTS

b. If report:
Title:

4. Document Date:

July 14, 1969

c. If publication:

Name:
Volume:
Issue:

5. Summary (2-3 lines indicating the major subject(s) of the document): Letter defines amount of iodine administered to Mr. Rowland during a 1968 experiment at the University of Arkansas. A dose assessment is also attached.

6. Name and telephone number of person completing form: Thomas L. Baccus (208) 525-0696	7. Organization: Lockheed Idaho Technologies Co.	8. Date: June 14, 1995
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☐ Check here if a copy of the document is being sent to Headquarters.

HUMAN RADIATION EXPERIMENTS

RECORDS PROVENANCE FORM

REPOSITORY NAME		INEL
* COLLECTION NAME	ORIGINAL NAME	OCCUPATIONAL DOSIMETRY RECORDS
	NEW NAME	U.S. ATOMIC ENERGY COMMISSION IDAHO OPERATIONS OFFICE ANALYTICAL CHEMISTRY BRANCH OCCUPATIONAL DOSIMETRY AND SAMPLE ANALYSES RECORDS
BOX NUMBER		CABINET #1, DRAWER #2
ADDITIONAL LOCATION INFORMATION		RESL, CFA-690, ROOM #208 FOLDER: NONE
FILE TITLE		RECORD OF INTERNAL DOSE ASSESSMENTS
TOTAL PAGES		
BATE NUMBER RANGE		
DOCUMENT NUMBER RANGE		

ORIGINAL HEI FORM DOCUMENT NO.: T070037

NEW HEI FORM DOCUMENT NO.: T070037

DOCUMENT NO.: T070584

DOCUMENT TITLE: RECORD OF INTERNAL DOSE ASSESSMENTS

CROSS REFERENCES:

ITEMS OF INTEREST:

Redacted Versionby N/A
date N/A

* A NEW COLLECTION NAME REPLACED THE ORIGINAL DUE TO REORGANIZATION OF
RECORD SERIES



UNIVERSITY OF ARKANSAS
MEDICAL CENTER

LITTLE ROCK

July 14, 1969

SCHOOL OF MEDICINE

SCHOOL OF NURSING

SCHOOL OF PHARMACY

UNIVERSITY HOSPITAL

[REDACTED]
Aerosol Studies Section
Industrial Hygiene Group
University of California
Los Alamos Scientific Laboratory
P. O. Box 1663
Los Alamos, New Mexico 87544

Dear [REDACTED]

The doses of radioactive material administered to you during our 1968 experiments were as follows:

December 9, 1968, - 10 μ c ^{131}I - labeled triiodothyronine
plus 50 μ c ^{125}I - labeled Thyroxine.

December 16, 1968 - 10 μ c ^{131}I - labeled Sodium Iodide.

I hope you are enjoying your new job.

Yours sincerely,

T. H. Oddie, D. Sc.

THO/cmw

Redacted Version

by [REDACTED]
date 8/25/95

REPOSITORY INEL
COLLECTION OCCUPATIONAL DOSIMETRY RECORDS
CABINET #1 DRAWER #2
BOX No. RESL CEA 690 ROOM # 208
RECORD OF INTERNAL DOSE ASSESSMENT
FOLDER FOR [REDACTED]

***** SAIC REMedy Intake/Dose Evaluation Report *****
*
* CASE : Acute Inhalation of I-131 D on 9 DEC 2068
* BIOASSAY : 24hr Urine Analysis on 10 DEC 2068 - 2.13E-03 uCi/cc ID# EST
*

***** INPUT DATA *****

Subject Name :
Analyst : JHO ID# X

AMAD (um) : 1.00
Days Post Exposure: 1.0

Lung Model : ICRP30 Lung Model ID : LungDat.lib

ALI (Bq) : 2.00E+06 Screening Level(Bq) : 1.00E+05
ALI (uCi) : 5.41E+01 Screening Level(uCi) : 2.70E+00

TC Half-Time(Days): 2.50E-01 Fu : 9.70E-01
F1 : 1.00E+00 Ff : 3.00E-02

***** RESULTS USING ICRP-30 SYSTEMIC MODEL *****

Retention Fraction at Time Post-Exposure : 2.98E-01
Intake (Bq) : 3.71E+05 % ALI : 18.53
Intake (uCi) : 1.00E+01 % Screening Level : 370.58

ORGAN	50-Year Committed Dose		First-Year Dose	
	[Rem]	[Sv]	[Rem]	[Sv]
GONADS	9.38E-04	9.38E-06	9.38E-04	9.38E-06
BREAST	2.92E-03	2.92E-05	2.92E-03	2.92E-05
R.MARROW	2.32E-03	2.32E-05	2.32E-03	2.32E-05
LUNGS	2.43E-02	2.43E-04	2.43E-02	2.43E-04
THYROID	1.08E+01	1.08E-01	1.08E+01	1.08E-01
ENDOSTEAL	2.12E-03	2.12E-05	2.12E-03	2.12E-05
REMAINDER	3.08E-03	3.08E-05	3.08E-03	3.08E-05
EFFECTIVE	3.29E-01	3.29E-03	3.29E-01	3.29E-03

*** WARNING *** Intake Requires investigation

***** DOSE FACTORS USED IN CALCULATIONS *****

Organ	Dose Factor [Sv/Bq]
GONADS	2.53E-11
BREAST	7.88E-11
R.MARROW	6.26E-11
LUNGS	6.57E-10
THYROID	2.92E-07
ENDOSTEAL	5.73E-11
REMAINDER	8.31E-11
EFFECTIVE	8.89E-09

COMMENTS: REMedy 2.2 used to Estimated CEDE for Volinteed
SIGNATURE: intake of 10 pCi as indicated

***** SAIC REMedy Intake/Dose Evaluation Report *****
CASE : Acute Inhalation of I-125 D on 9 DEC 2068
BIOASSAY : 24hr Urine Analysis on 10 DEC 2068 - 1.14E-02 uCi/cc ID# EST

***** INPUT DATA *****

Subject Name :
Analyst : JHO ID# X

AMAD (um) : 1.00
Days Post Exposure: 1.0

Lung Model : ICRP30 Lung Model ID : LungDat.lib

ALI (Bq) : 2.00E+06 Screening Level(Bq) : 1.00E+05
ALI (uCi) : 5.41E+01 Screening Level(uCi) : 2.70E+00

TC Half-Time(Days): 2.50E-01 Fu : 9.70E-01
F1 : 1.00E+00 Ff : 3.00E-02

***** RESULTS USING ICRP-30 SYSTEMIC MODEL *****

Retention Fraction at Time Post-Exposure : 3.21E-01
Intake (Bq) : 1.84E+06 % ALI : 92.05
Intake (uCi) : 4.98E+01 % Screening Level : 1840.90

ORGAN	50-Year Committed Dose		First-Year Dose	
	[Rem]	[Sv]	[Rem]	[Sv]
GONADS	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BREAST	0.00E+00	0.00E+00	0.00E+00	0.00E+00
R.MARROW	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LUNGS	0.00E+00	0.00E+00	0.00E+00	0.00E+00
THYROID	4.05E+01	4.05E-01	4.05E+01	4.05E-01
ENDOSTEAL	0.00E+00	0.00E+00	0.00E+00	0.00E+00
REMAINDER	0.00E+00	0.00E+00	0.00E+00	0.00E+00
EFFECTIVE	1.20E+00	1.20E-02	1.20E+00	1.20E-02

*** WARNING *** Intake Requires investigation

***** DOSE FACTORS USED IN CALCULATIONS *****

Organ	Dose-Factor [Sv/Bq]
GONADS	0.00E+00
BREAST	0.00E+00
R.MARROW	0.00E+00
LUNGS	0.00E+00
THYROID	2.20E-07
ENDOSTEAL	0.00E+00
REMAINDER	0.00E+00
EFFECTIVE	6.50E-09

COMMENTS: REMedy 2.9 used to Estimate CEDE for this Volunteer
SIGNATURE: individual with 50uCi Intake for Experiment @ U-Ark



ID F-5484.1B (Rev. 04-82)
(Ref. ID: 5484.1)

U.S. DEPARTMENT OF ENERGY
IDAHO OPERATIONS OFFICE
PREVIOUS RADIATION EXPOSURE HISTORY

Present Employer: *U S Dept of Energy*
Id. OPS office

Work Location:
Idaho Falls

1. Name: (Last) (First) (Middle) (Maiden)

2. Date of Birth
(Day, Month, Year)

3. Social Security Number:

4. Radiation exposure histories are maintained by the DOE Dosimetry Branch for all facilities at the Idaho National Engineering Laboratory (INEL) except the Idaho Naval Reactor Facility (NRF). Have you worked with radioactive materials or radiation producing equipment that required wearing a radiation measuring device at locations other than INEL including the NRF?

☐ No ☒ Yes Estimated Exposure (Mr) _____

5. If you have checked "Yes" above, list the organization(s) where radioactive work was accomplished. In addition, sign one copy of ID F-5480.1 for each organization listed. To obtain your past radiation exposure record, please print and provide complete mailing address including ZIP code. Do not abbreviate.

Organization	Mailing Address and Zip Code	Period of Employment	
		From	To
<i>UNIVERSITY of ARKANSAS medical Center Little Rock, ARKANSAS</i>	<i>(NOT AN Employee) Graduate Student</i>	<i>1968</i>	<i>1970</i>

6. Have you had internal exposure to radioactive materials?

Details: *see Attached Letter*

7. I certify that the above information is correct and complete to the best of my knowledge.

Signature _____

Date *8 Dec 86*

cc: Dosimetry Branch, Radiological and Environmental Sciences Laboratory ☒ Yes ☐ No

Privacy Act Statement (PL 93-597)

The authority for requesting this information is Public Law 93-438 (The Energy Reorganization Act of 1974) which authorizes the Department of Energy (DOE) to maintain radiation exposure records keeping system to perform the functions vested in DOE. The disclosure of such information may be a condition of employment and will be used by DOE and its contractors to develop a data base of your exposure history. The information is used for your protection, is confidential, and is released to others under controlled circumstances. Personal information such as name, age, Social Security number, etc., will be used to develop an accurate and unique records identification.

Replaces: ID F-101 (Rev. 10-81)